### UNITED STATES DISTRICT COURT WESTERN DISTRICT OF TEXAS WACO DIVISION

PARKERVISION, INC.,

| (

Civil Action No. 6:20-cv-00108-ADA

Plaintiff,

**JURY TRIAL DEMANDED** 

vs.

INTEL CORPORATION,

Defendant.

**PUBLIC VERSION** 

INTEL CORPORATION'S MOTION FOR SUMMARY JUDGMENT OF NONINFRINGEMENT REGARDING U.S. PATENT NO. 7,539,474

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#### I. INTRODUCTION

Intel moves for summary judgment of noninfringement as to the sole asserted claim of one of ParkerVision's six asserted patents. As construed by the Court, claim 6 of U.S. Patent No. 7,539,474 (the "'474 patent") requires a switch to be "directly connected or connected through a conductor (or a closed switch)" to a reference potential. Dkt. 75, Claim Construction Order, at 4. In the relevant circuitry of each of Intel's SMARTi chips at issue, however, the switch is neither "directly connected" nor "connected through a conductor (or closed switch)" to the alleged reference potential as required. Instead, the opposite is true:

Accordingly, summary judgment of noninfringement of claim 6 of the

'474 patent is warranted.

#### II. BACKGROUND

#### A. The '474 Patent.

The '474 patent is directed to receivers that down-convert an input signal from a high frequency to a low frequency. Claim 1 of the '474 patent, on which asserted claim 6 depends, recites two "frequency down-conversion modules," each having four components: a switch, storage element, node, and reference potential. Dkt. 1-4, '474 patent, at claim 1. Specifically, claim 1 states in relevant part:

wherein the first frequency down-conversion module comprises a first switch and a first storage element, wherein the first switch is coupled to the first storage element at a first node and coupled to a first reference potential; and

wherein the second frequency down-conversion module comprises a second switch and a second storage element, wherein the second switch is coupled to the second storage element at a second node and coupled to a second reference potential.

Id.<sup>1</sup> Claim 6 depends on claim 1 and thus includes these same requirements. Asserted claim 6 thus requires the components to be connected in a specific configuration such that "the [first/second] switch is coupled to the [first/second] storage element at a [first/second] node and coupled to a [first/second] reference potential." Id. The Court construed this claim phrase to have its "[p]lain-and-ordinary meaning wherein 'coupled' is directly connected or connected through a conductor (or a closed switch)." Dkt. 75, Claim Construction Order, at 4.

#### B. Intel's SMARTi Transceivers.

ParkerVision accuses Intel's SMARTi 4, 4.5, 5, 6, 7, and 8 transceivers of infringing claim
6 of the '474 patent. ParkerVision's technical expert, Dr. Michael Steer, alleges that these
SMARTi products infringe claim 6 based on the claim charts provided in Appendices K-1 to K-6
of his opening report.<sup>2</sup> As Dr. Steer's report demonstrates, however,

Instead, in each instance,

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Dr. Steer acknowledges that each of the Intel products at issue has

Ex. 3, Steer Opening Rpt., Appendix K-3 (SMARTi5) at 92;

<sup>&</sup>lt;sup>1</sup> All emphases are added unless otherwise noted.

<sup>&</sup>lt;sup>2</sup> See Ex. 1, Opening Expert Report of Dr. Michael Steer ("Steer Opening Rpt."), Appendix K-1 (SMARTi4G) at 54-57; Ex. 2, Steer Opening Rpt., Appendix K-2 (SMARTi4.5) at 56-59; Ex. 3, Steer Opening Rpt., Appendix K-3 (SMARTi5) at 92-97; Ex. 4, Steer Opening Rpt., Appendix K-4 (SMARTi6T) at 92-97; Ex. 5, Steer Opening Rpt., Appendix K-5 (SMARTi7.1) at 64-69; Ex. 6, Steer Opening Rpt., Appendix K-6 (SMARTi8) at 60-65.

See Ex. 1, Steer Opening Rpt., Appendix K-1 (SMARTi4G) at 54, 56; Ex. 2, Steer Opening Rpt., Appendix K-2 (SMARTi4.5) at 56, 58; Ex. 3, Steer Opening Rpt., Appendix K-3 (SMARTi5) at 92-93, 95-96; Ex. 4, Steer Opening Rpt., Appendix K-4 (SMARTi6T) at 92-93, 95-96; Ex. 5, Steer Opening Rpt., Appendix K-5 (SMARTi7.1) at 64-65, 67-68; Ex. 6, Steer Opening Rpt., Appendix K-6 (SMARTi8) at 60, 63.

Ex. 7, October 17, 2022 Steer Dep. at 170:10-171:18
.4 As shown below,
Ex. 3, Steer Opening Rpt., Appendix K-3 (SMARTi5) at 92. But
as also shown in Dr. Steer's report,
Id. (enlarged and annotated); see also id. at 95-96 (
). Specifically, as Dr. Steer concedes,
See, e.g., Ex. 8, Steer Opening Rpt.,
¶ 102.
See Ex. 1, Steer Opening Rpt.,
<sup>4</sup> All exhibits are attached to the Declaration of Harry Hanson, filed concurrently herewith.

<sup>&</sup>lt;sup>4</sup> All exhibits are attached to the Declaration of Harry Hanson, filed concurrently herewith.
<sup>5</sup> ParkerVision and Dr. Steer's allegations regarding the required switch coupled to a reference

potential are . See supra note 2.

Appendix K-1 (SMARTi4G) at 54, 56; Ex. 2, Steer Opening Rpt., Appendix K-2 (SMARTi4.5) at 56, 58; Ex. 3, Steer Opening Rpt., Appendix K-3 (SMARTi5) at 92-93, 95-96; Ex. 4, Steer Opening Rpt., Appendix K-4 (SMARTi6T) at 92-93, 95-96; Ex. 5, Steer Opening Rpt., Appendix K-5 (SMARTi7.1) at 64-65, 67-68; Ex. 6, Steer Opening Rpt., Appendix K-6 (SMARTi8) at 60, 63.

#### III. LEGAL STANDARD

Summary judgment shall be granted when "there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a); see also Celotex Corp. v. Catrett, 477 U.S. 317, 322 (1986). A fact dispute is genuine if "the evidence is such that a reasonable jury could return a verdict for the nonmoving party." Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986). "[M]ere conclusory allegations are . . . insufficient . . . to defeat a motion for summary judgment." Eason v. Thaler, 73 F.3d 1322, 1325 (5th Cir. 1996).

#### IV. ARGUMENT

# A. The Accused Products Do Not Include the Required Switch Coupled To A Reference Potential.

The undisputed facts demonstrate that the switch and alleged reference potential in the Intel chips at issue are neither "directly connected" nor "connected through a conductor (or closed switch)" as the claim requires.

First, the switches are not directly connected to the alleged reference potentials. Instead, it is undisputed that

See Ex. 1, Steer Opening Rpt., Appendix K-1 (SMARTi4G) at 54, 56; Ex. 2, Steer Opening Rpt., Appendix K-2 (SMARTi4.5) at 56, 58; Ex. 3, Steer Opening Rpt., Appendix K-3 (SMARTi5) at 92-93, 95-96; Ex. 4, Steer Opening Rpt., Appendix K-4 (SMARTi6T) at 92-93, 95-96; Ex. 5, Steer Opening Rpt., Appendix K-5 (SMARTi7.1) at 64-65, 67-68; Ex. 6, Steer Opening Rpt., Appendix K-6 (SMARTi8) at 60, 63.

**Second**, the switches in the Intel chips are not connected to the alleged reference potentials

through a conductor (or closed switch). Instead, the opposite is true: See supra note 3; Ex. 8, Steer Opening Rpt., ¶¶ 102-03 ("A resistor is a circuit element that *introduces resistance* into a circuit. . . . Resistors are used, for example, to reduce current flow...."). ParkerVision cannot overcome this difference ParkerVision's own expert, Dr. Steer, has acknowledged—and it is well established—that conductors and resistors are different types of circuit components with different purposes. See Ex. 8, Steer Opening Rpt., ¶ 102-03 ("A resistor is a circuit element that *introduces resistance* into a circuit.... Resistors are used, for example, to reduce current flow..."); Ex. 7, October 17, 2022 Steer Dep. at 167:19-168:1 ("A conductor is something that conducts current. A conductor is, I guess, is a resistance, with, like, a low resistance. Well, not necessarily a low resistance, but generally a conductor has low resistance. You'd like it to be zero, but that is physically not possible."). Indeed, in his textbook, ParkerVision's expert states that: "[e]lectrical conductivity is the inverse of resistivity."

<sup>&</sup>lt;sup>6</sup> See, e.g., Ex. 7, October 17, 2022 Steer Dep. at 167:19-168:1 ("Q. What is a conductor? A. A conductor is something that conducts current. A conductor is, I guess, is a resistance, with, like, a low resistance. Well, not necessarily a low resistance, but generally a conductor has low resistance. You'd like it to be zero, but that is physically not possible."); Ex. 9, Microsoft Computer Dictionary (5th ed. 2002) ("conductor[:] A substance that conducts electricity well. Metals are good conductors, with silver and gold being among the best. The most commonly used conductor is copper."); Ex. 10, Wiley Electrical and Electronics Engineering Dictionary, IEEE Press (2004) ("conductor[:] 1. A medium suitable for the conduction of electrical, acoustic, heat, or other form of energy. 2. A medium which allows electric current to flow easily. Such a medium may be a metal wire, a dissolved electrolyte, or an ionized gas, among others. Among the elements, silver, copper, and gold are the best electric conductors. Also known as electric conductor.").

Ex. 11, Michael Steer, *Microwave and RF Design: A Systems Approach* (2010), at 842. Moreover, because it is undisputed that virtually all circuit components allow some current to flow, *see*, *e.g.*, Ex. 12, Rebuttal Expert Report of Dr. Vivek Subramanian, ¶ 835, ParkerVision's argument would mean that virtually all circuit components would constitute conductors and that all of the components of a circuit would be connected through conductors thus rendering the "connected through a conductor" claim requirement completely meaningless. *See Cat Tech LLC v. TubeMaster, Inc.*, 528 F.3d 871, 885-86 (Fed. Cir. 2008) (affirming district court's grant of summary judgment of noninfringement where plaintiff's "strained . . . construction" would render claim limitation "functionally meaningless").

#### V. CONCLUSION

The undisputed facts demonstrate that the Intel SMARTi chips at issue do not include the required switch coupled directly or through a conductor (or a closed switch) to a reference potential as required by claim 6 of the '474 patent. Summary judgment of noninfringement of claim 6 of the '474 patent should therefore be granted.

Dated: October 28, 2022

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### **CERTIFICATE OF SERVICE**

I hereby certify that all counsel of record who are deemed to have consented to electronic service are being served with a copy of the foregoing document via electronic mail on October 28, 2022.

/s/ J. Stephen Ravel
J. Stephen Ravel